# 13 STATISTICS, REPORT WRITING, AND CODIS TRAINING PROGRAM FOR THE ANALYSIS OF FORENSIC CASEWORK USING PCR-BASED STR FLUORESCENCE IMAGING ANALYSIS AT THE POWERPLEX® 16 BIO LOCI Effective Date: 1-August-2005

#### 13 STATISTICS, REPORT WRITING, AND CODIS

#### 13.1 GOALS:

- 13.1.1 To become familiar with the format and wording presently being used by DFS Forensic Biology examiners.
- 13.1.2 To become skilled in expressing the results of the PowerPlex<sup>®</sup> 16 BIO typing of a sample in a clear, concise and technically correct fashion.
- 13.1.3 To become skilled in the computation and explanation of statistical information associated with PowerPlex® 16 BIO typing results, using random match probabilities, likelihood ratios, and CPE.
- 13.1.4 To become familiar with the Combined DNA Index System applications/policies and procedures, and documentation required.

#### 13.2 TASKS:

- 13.2.1 Review Certificates of Analysis prepared by examiners and compare to the corresponding gel images and Lookup Table/STaRCall/Landscape printouts.
- 13.2.2 Draft reports on actual case gels and compare these to the Certificates of Analysis issued by the examiners. Refer to the Commonwealth of Virginia Department of Forensic Science

  Forensic Biology Section Procedure Manual, Section III Fluorescent Detection PCR-Based STR DNA Protocol: PowerPlex® 16 BIO System for the procedure.
- 13.2.3 Compute statistical information on actual casework samples typed at the PowerPlex® 16 BIO System loci. Compare this information to that reported by the examiner.
- 13.2.4 Read and become familiar with the <u>Commonwealth of Virginia Department of Forensic Science CODIS Operating Policies and Procedures Manual.</u>
- 13.2.5 Read applicable literature and become familiar with glossary terms. Refer to Appendices A, B, and C.
- 13.2.6 Perform CODIS searches under the direct supervision of qualified examiners and generate the proper documentation associated with the CODIS search.

#### 13.3 TRAINING EVALUATION:

#### 13.3.1 Knowledge

- 13.3.1.1 Review of notes, computations, and reports prepared by the trainee in training notebook by training coordinator.
- 13.3.1.2 Mini-mock trials and/or question and answer sessions.

# 13 STATISTICS, REPORT WRITING, AND CODIS Page 2 of 3 TRAINING PROGRAM FOR THE ANALYSIS OF FORENSIC Issue No. 2 CASEWORK USING PCR-BASED STR FLUORESCENCE IMAGING ANALYSIS AT THE POWERPLEX® 16 BIO LOCI Effective Date: 1-August-2005 13.3.2 Skills 13.3.2.1 The trainee should demonstrate the ability to clearly, accurately and concisely set forth STR analytical results, including statistical information using random match probabilities, likelihood ratios, and combined probability of exclusion (CPE) in a report. 13.3.2.2 The trainee should demonstrate the ability to use CODIS. 13.3.3 Completion of the trainee checklist by the training coordinator.

### 13 STATISTICS, REPORT WRITING, AND CODIS

## TRAINING PROGRAM FOR THE ANALYSIS OF FORENSIC CASEWORK USING PCR-BASED STR FLUORESCENCE IMAGING ANALYSIS AT THE POWERPLEX® 16 BIO LOCI

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Issue No. 2

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### CHECKLIST FOR STATISTICS, REPORT WRITING, AND CODIS

Name	e of Trainee:
1.	Trainee is familiar with the report wording and format that is currently used by the examiners in the Forensic Biology Section of the Virginia Department of Forensic Science.
	Date: Training Coordinator:
	Comments:
2.	Trainee has demonstrated his/her ability to accurately interpret DNA typing results and accurately calculate random match probabilities, likelihood ratios and combined probability of exclusion statistics using actual cases.
	Date: Training Coordinator:
	Comments:
3.	Trainee has used the DNA results of examinations on actual cases to write reports which were then compared to the original reports. Results were satisfactory.
	Date: Training Coordinator:
	Comments:
1.	Notebook is organized and complete.
	Date: Training Coordinator:
	Comments:
5.	Trainee is familiar with Combined DNA Index System applications/procedures.
	Date: Training Coordinator:
	Comments:
5.	Trainee has participated in mini-mock trialS and/or question and answer sessions.
	Date: Training Coordinator:
	Comments: